

CLAIMS

1. A multistandard RF receiver comprising:
a plurality of selectable mixers;
a plurality of selectable amplifiers;
5 a configurable analog filter; and
a configurable analog to digital converter.
2. A multistandard RF transmitter comprising:
a plurality of selectable mixers;
10 a plurality of selectable amplifiers;
a configurable analog filter; and
a configurable digital to analog converter.
3. A multistandard RF receiver comprising:
15 a data interface for sending data to a host controller;
a control interface for receiving configuration commands from the host controller
wherein the configuration commands identify a wireless standard that is to be
implemented by the RF receiver; and
an RF processor for processing an RF signal wherein the processed RF signal is
20 output to the host controller on the data interface.
4. A multistandard RF receiver as recited in claim 3 further including a feature
register for storing information about wireless standards supported by the device.
- 25 5. A multistandard RF receiver as recited in claim 3 further including a control
database for storing parameters for implementing the wireless standard.
6. A multistandard RF receiver as recited in claim 3 wherein the RF receiver
includes a configurable signal path.

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7. A multistandard RF receiver as recited in claim 3 wherein the RF receiver includes configurable components.
8. A multistandard RF receiver as recited in claim 3 wherein the RF receiver includes a configurable analog filter.
9. A multistandard RF receiver as recited in claim 3 wherein the RF receiver includes configurable analog to digital converter.
- 10 10. A multistandard RF receiver as recited in claim 3 wherein the RF receiver includes plurality of selectable mixers.
11. A multistandard RF receiver as recited in claim 3 wherein the RF receiver includes plurality of selectable amplifiers.
- 15 12. A multistandard RF transmitter comprising:
a data interface for receiving data from a host controller;
a control interface for receiving configuration commands from the host controller
wherein the configuration commands identify a wireless standard that is to be
20 implemented by the RF transmitter; and
an RF processor for processing an RF signal wherein the processed RF signal is transmitted in accordance with the wireless standard.
13. A multistandard RF transmitter as recited in claim 12 further including a feature register for storing information about wireless standards supported by the device.
- 25 14. A multistandard RF transmitter as recited in claim 12 further including a control database for storing parameters for implementing the wireless standard.
- 30 15. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter includes a configurable signal path.

16. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter includes configurable components.

17. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter
5 includes a configurable analog filter.

18. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter includes configurable digital to analog converter.

19. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter
10 includes plurality of selectable mixers.

20. A multistandard RF transmitter as recited in claim 12 wherein the RF transmitter includes plurality of selectable amplifiers.

15 21. A multistandard RF transceiver comprising:
a plurality of selectable mixers;
a plurality of selectable amplifiers; and
a configurable digital signal processor that is configured to process a received
signal or a signal that is being transmitted.
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22. A method of processing an RF signal including:
receiving configuration information from a host processor;
configuring a signal path in accordance with the configuration information; and
configuring components in accordance with the configuration information.

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23. A host processor for interacting with a multistandard RF transceiver comprising:
a data interface for transmitting data to and receiving data from the multistandard
RF transceiver; and
a control interface for sending configuration information to the multistandard RF
30 transceiver.

24. A host processor for interacting with a multistandard RF transceiver as recited in claim 23 wherein the host processor receives information from the multistandard RF transceiver indicating the standards that are supported by the multistandard RF transceiver for interacting with a host processor.

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25. A multistandard RF receiver comprising:
an RF processor for processing an RF signal;
a digital to analog converter for converting the processed RF signal to a digital signal;
10 a digital signal processor for manipulating the digital signal; and
a programmable interface for outputting the processed signal.

26. A multistandard RF receiver as recited in claim 25 wherein the programmable interface includes a digital to analog converter for generating an analog signal.

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27. A multistandard RF receiver as recited in claim 25 wherein the programmable interface includes a programmable PLL.
20 28. A multistandard RF transmitter comprising:
a programmable interface for receiving a signal to be transmitted;
a digital signal processor for outputting a procesed signal from the programmable interface for transmitting;
an analog to digital converter for converting the processed signal to an analog signal; and
25 an RF processor for processing the analog signal.

29. A multistandard RF transmitter as recited in claim 28 wherein the programmable interface includes an analog to digital converter for converting the signal to be transmitted to a digital signal.

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30. A multistandard RF transmitter as recited in claim 28 wherein the programmable interface includes a programmable PLL.

31. A multistandard RF transceiver comprising:
a modular RF interface;
a control database having parameters for programming the RF interface;
5 a programming interface configured to receive updates for the control database.
32. A multistandard RF transceiver as recited in claim 31 wherein the programming interface is activated by a code that indicates that the control database is to be updated.
- 10 33. A multistandard RF transceiver as recited in claim 31 wherein the programming interface is separate from an interface used to select a set of values in the control database for programming the RF interface.

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